FIG. 1

REPRESENTATIVE ORGANOSILANES

R = functional group of chemical interest
A = non-reactive group
X = hydrolyzable group

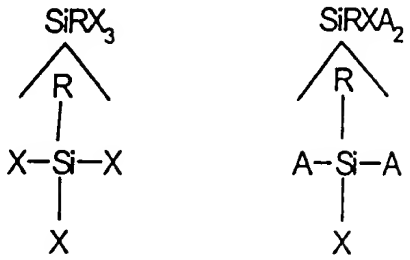


FIG. 2

HYDROLYSIS OF AN ORGANOSILANE TO PRODUCE AN ORGANOSILANOL

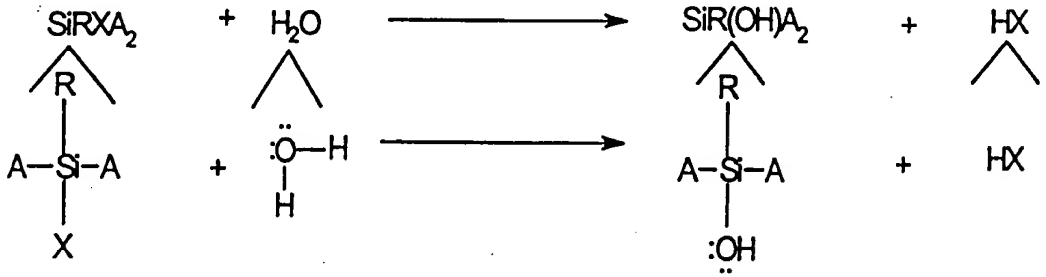


FIG. 3
SILANOL CONDENSATION REACTION

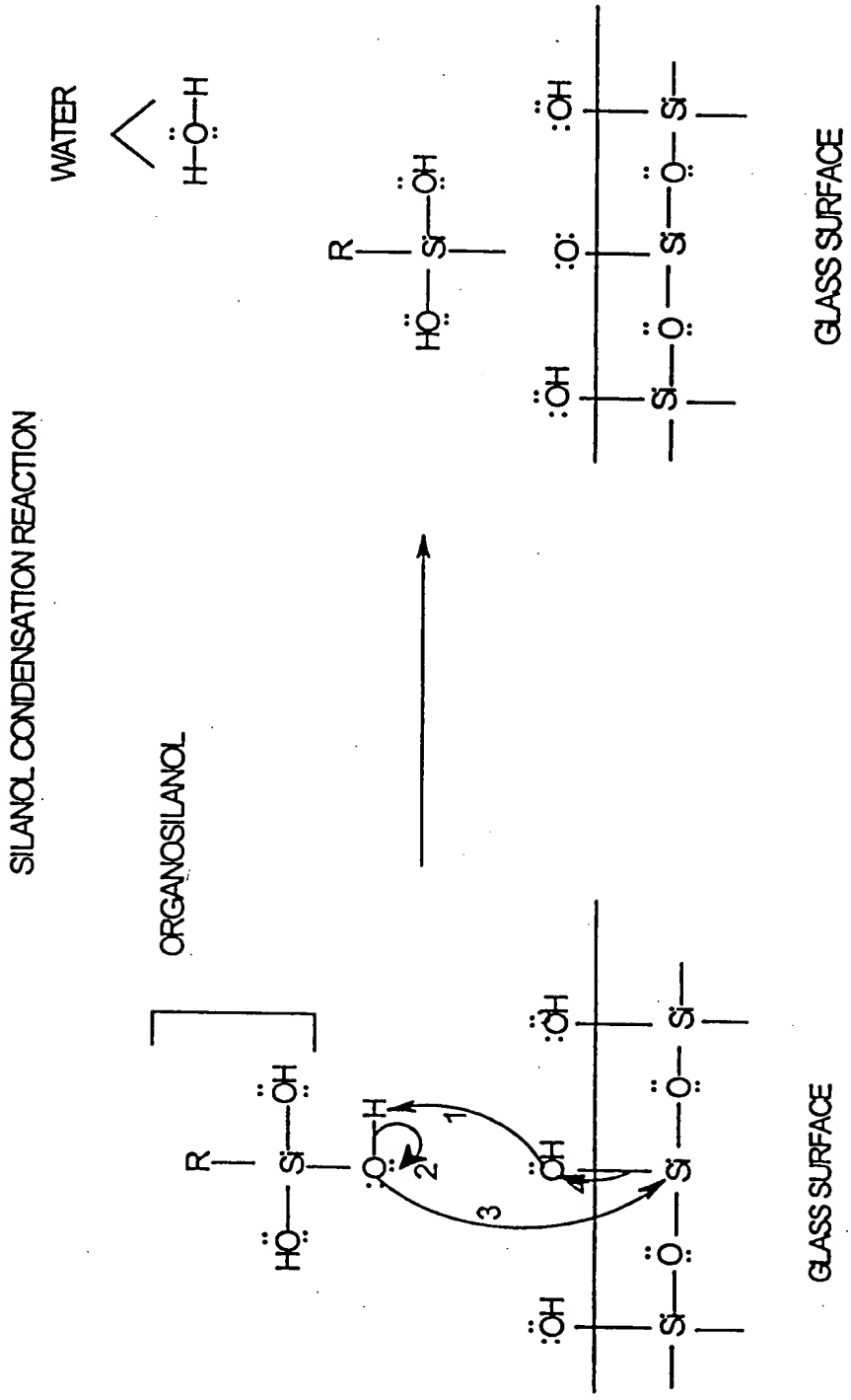


FIG. 4
REACTIONS OF EPOXY GROUPS

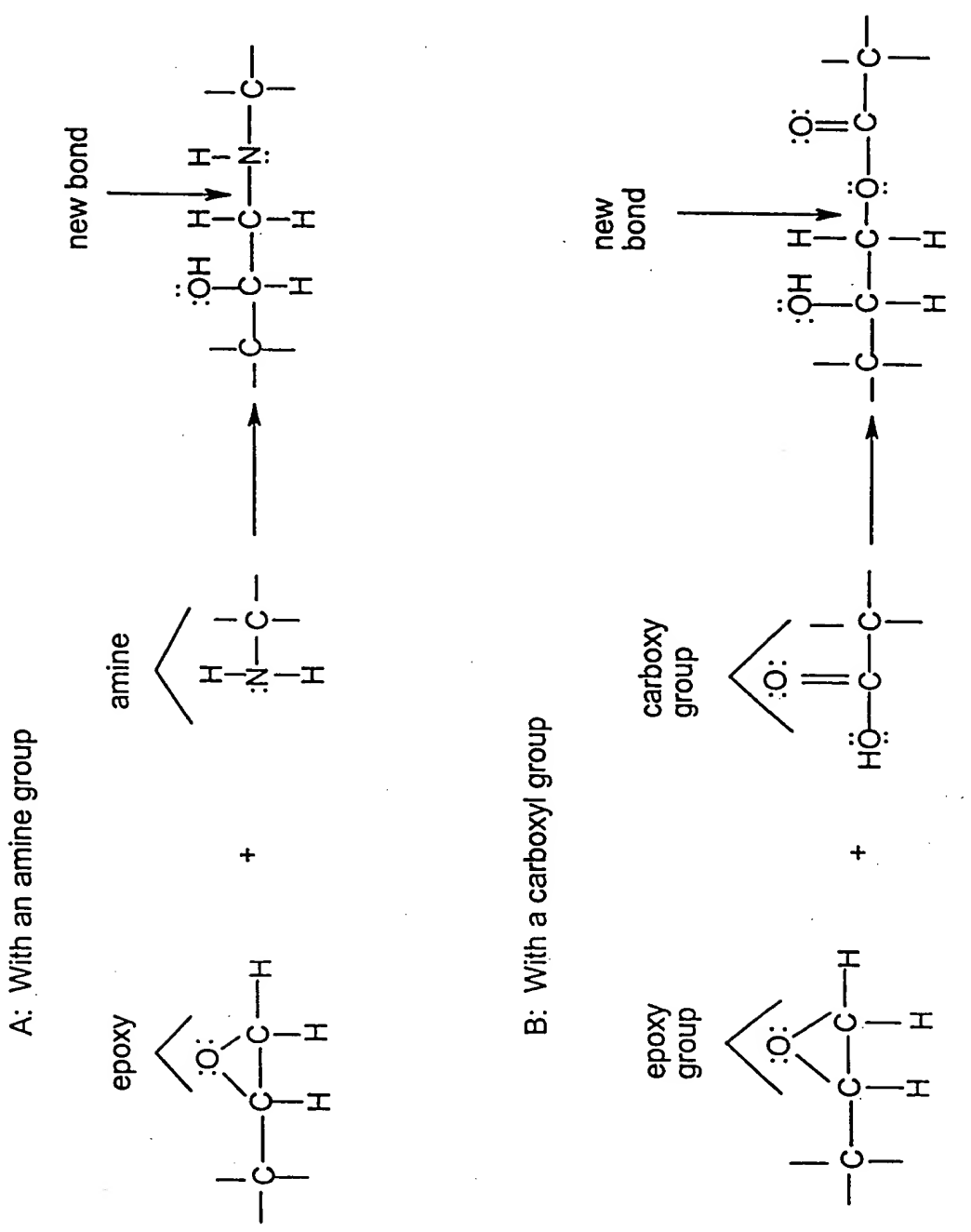


FIG. 5A

Bond using 3-Amino propyl triethonysilane and polyamido polamine epichlorohydrin polymer.

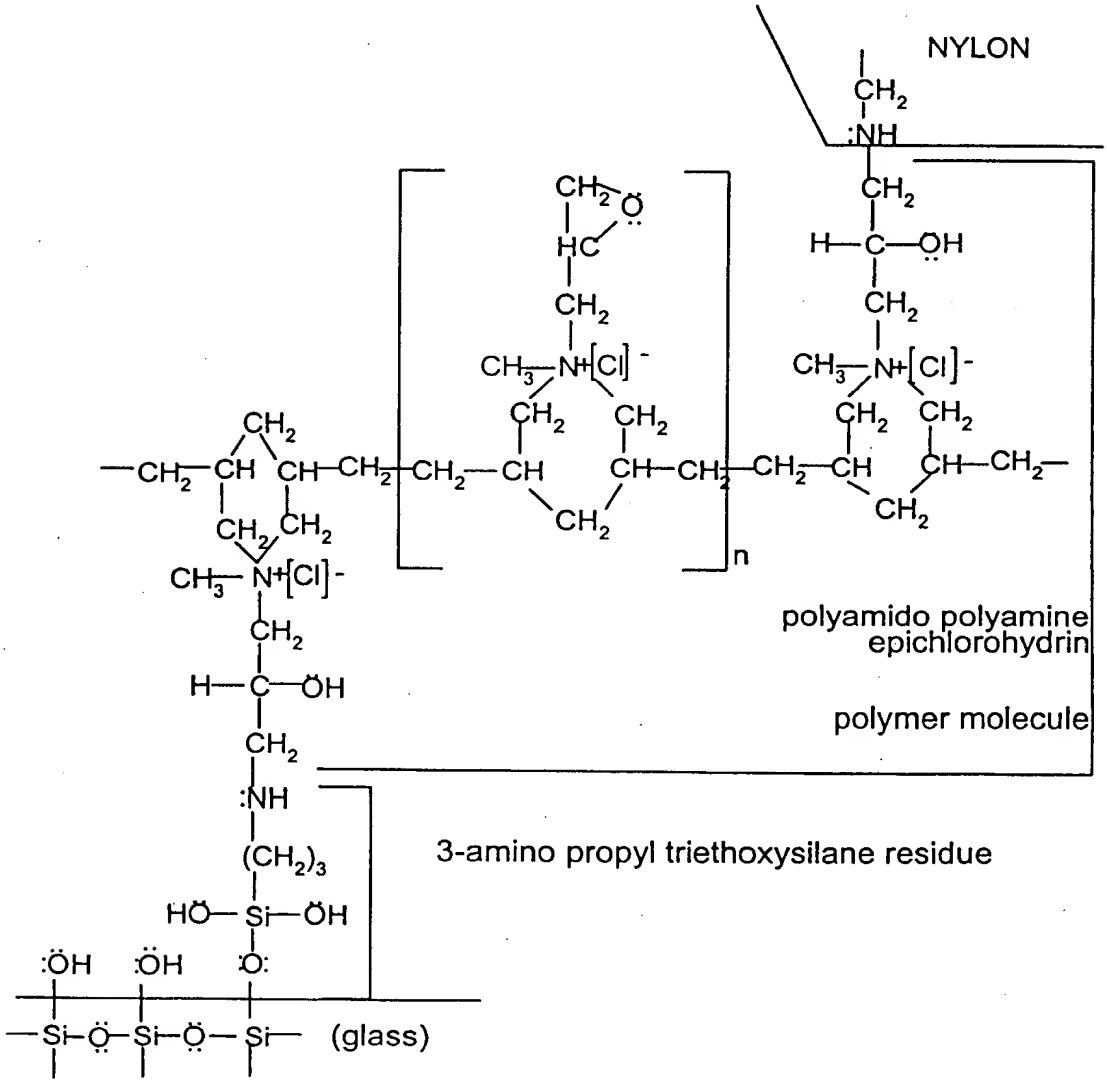


FIG. 5B

Bond using 10-carbomethoxy-decyl-dimethyl chlorosilane and polyamido polyamine epichlorohydrin polymer.

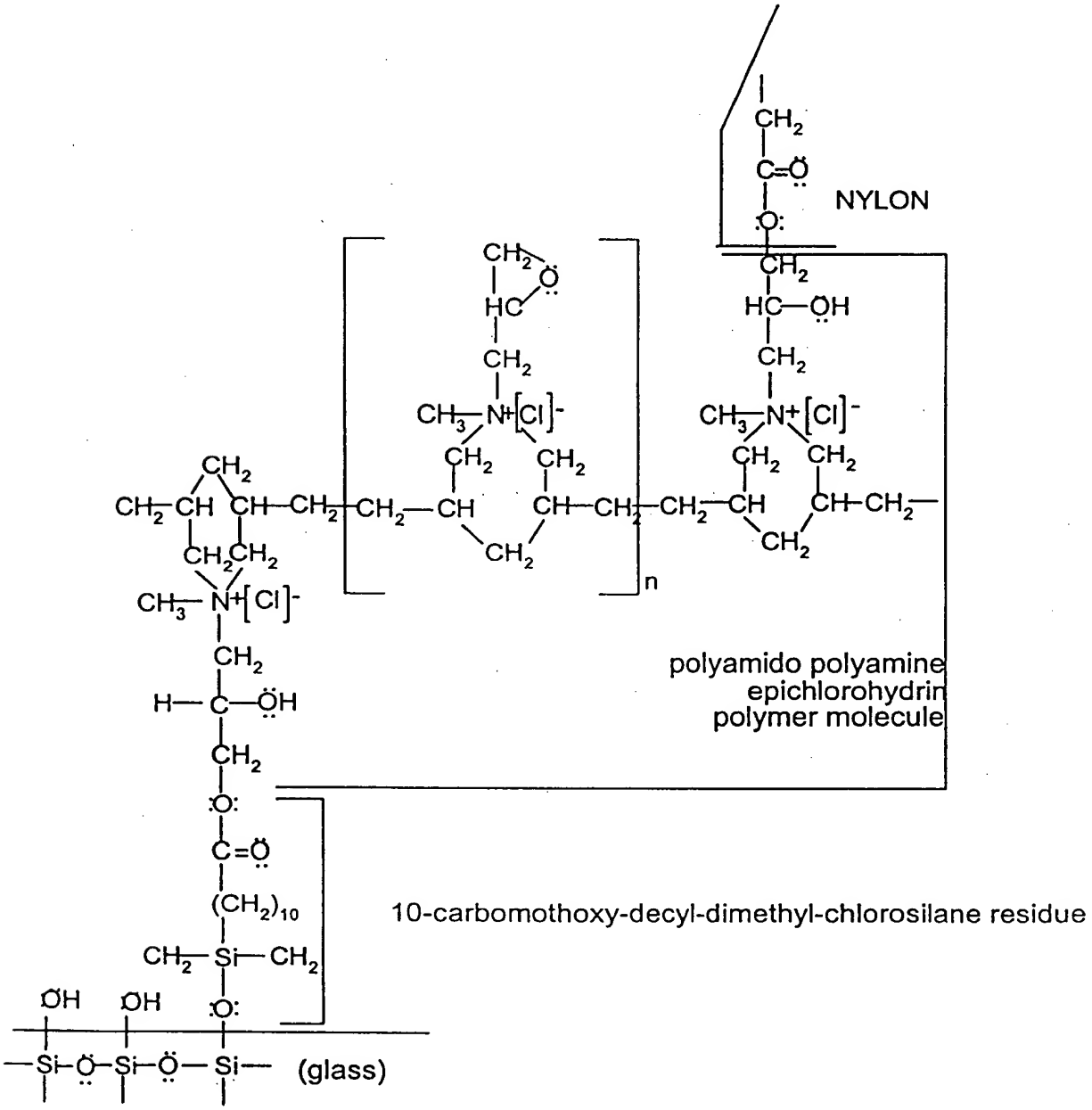
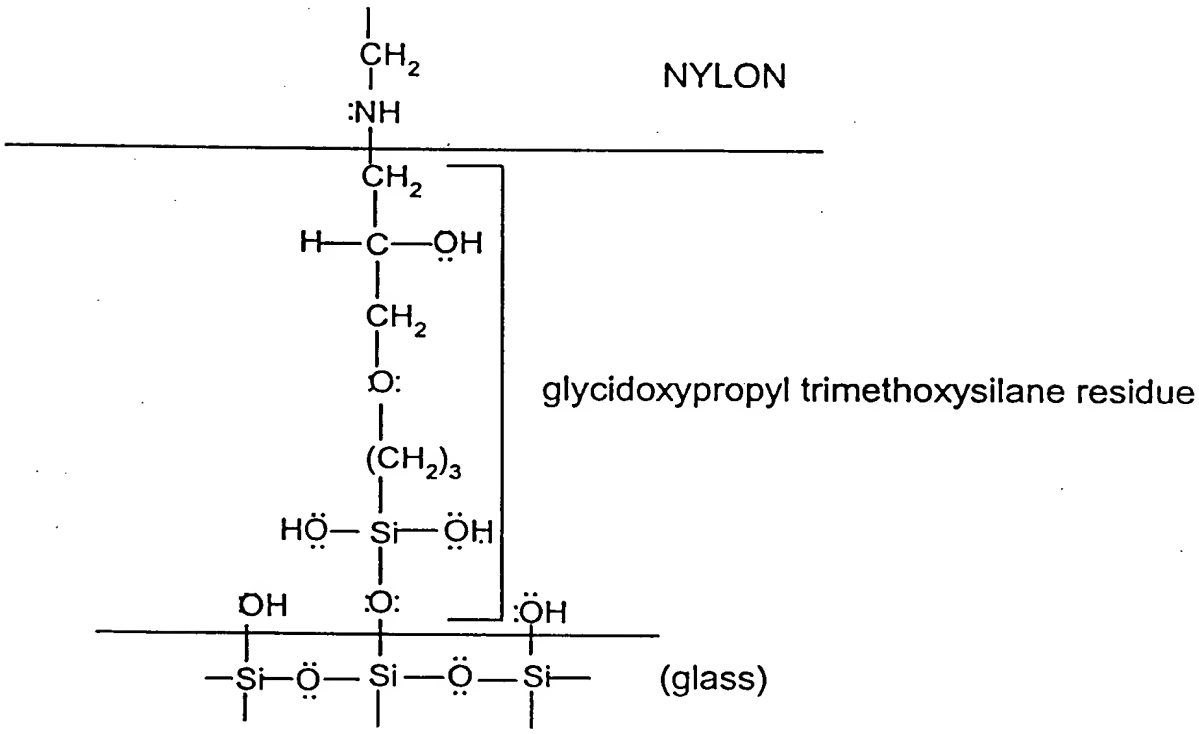


FIG. 5C

Bond using glycidoxypropyl trimethoxysilane



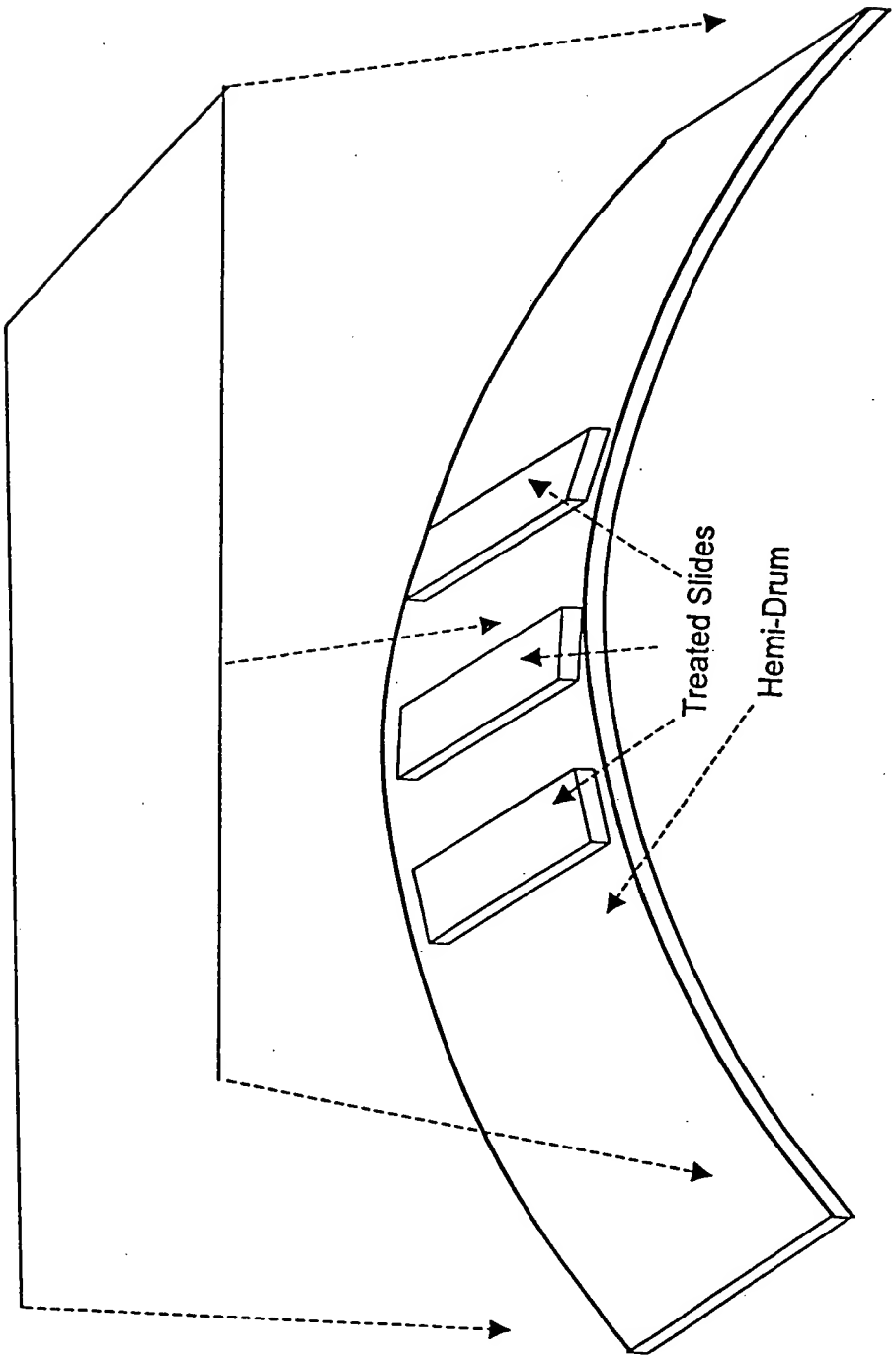


FIG. 6

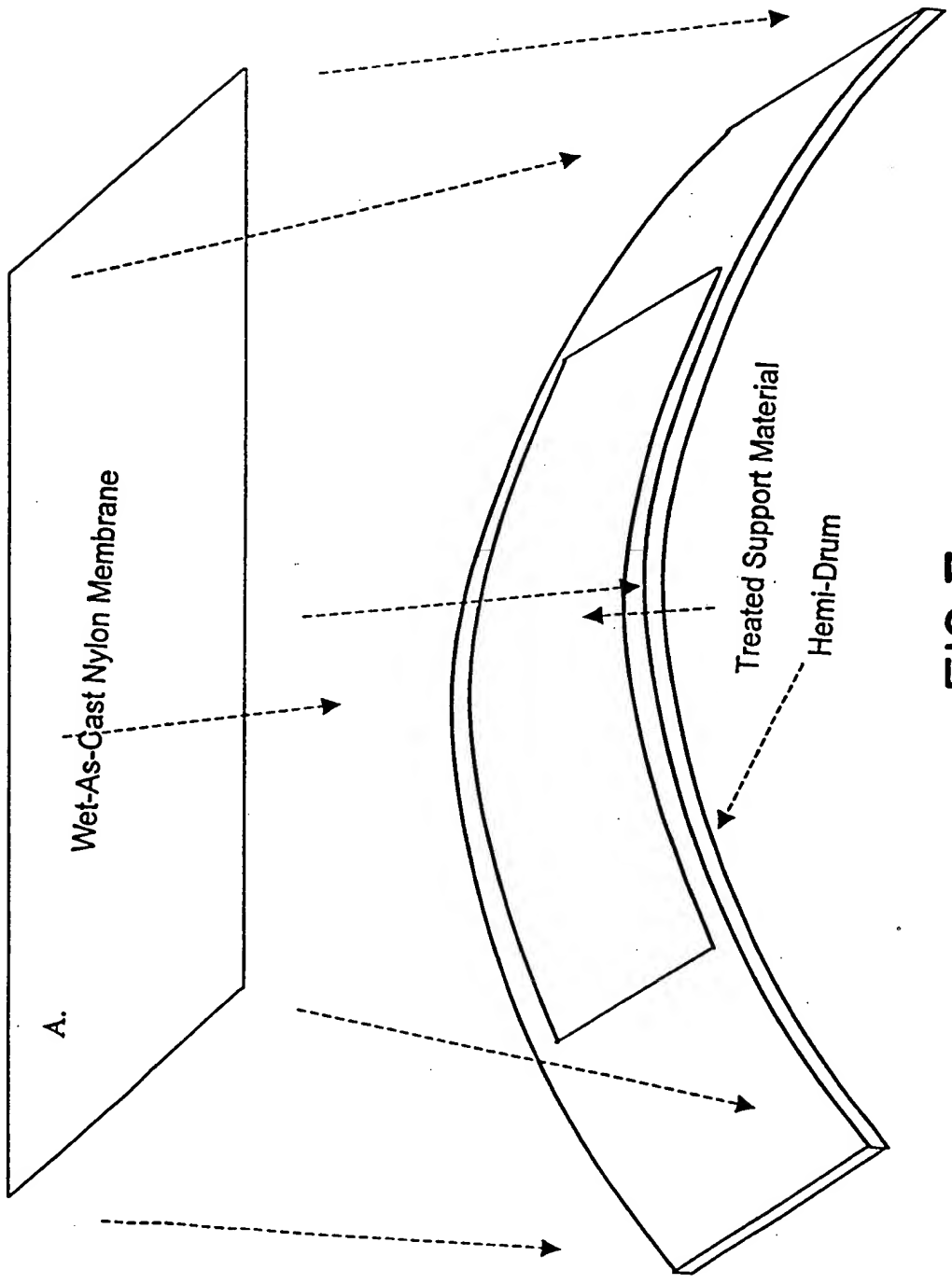


FIG. 7

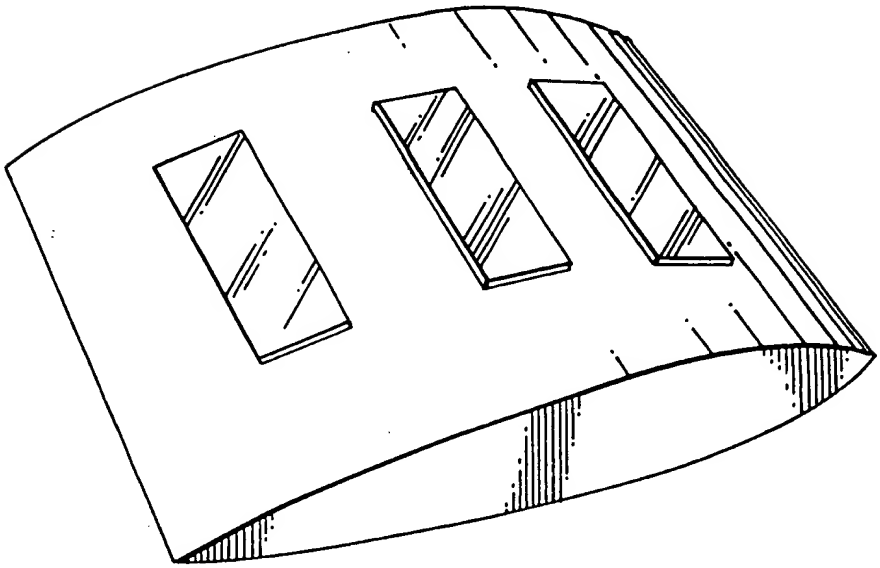


FIG. 6A

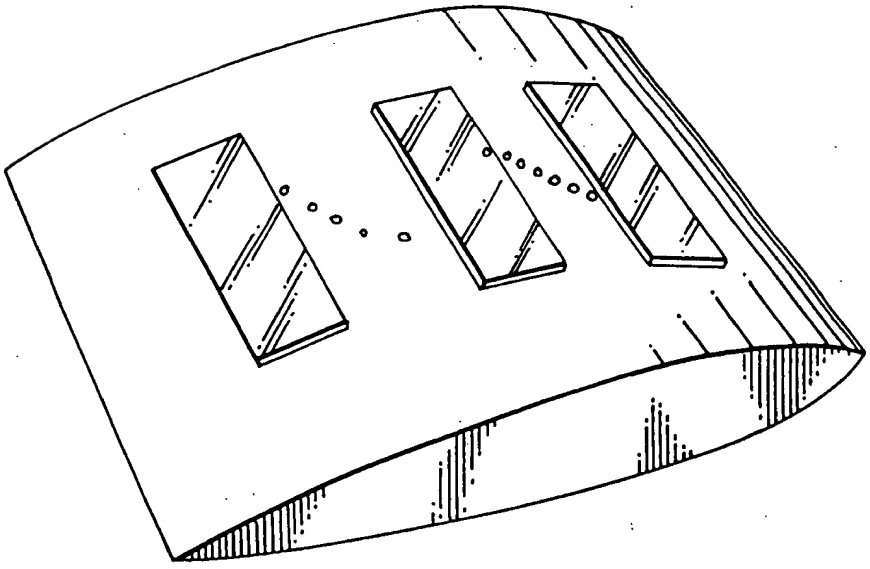
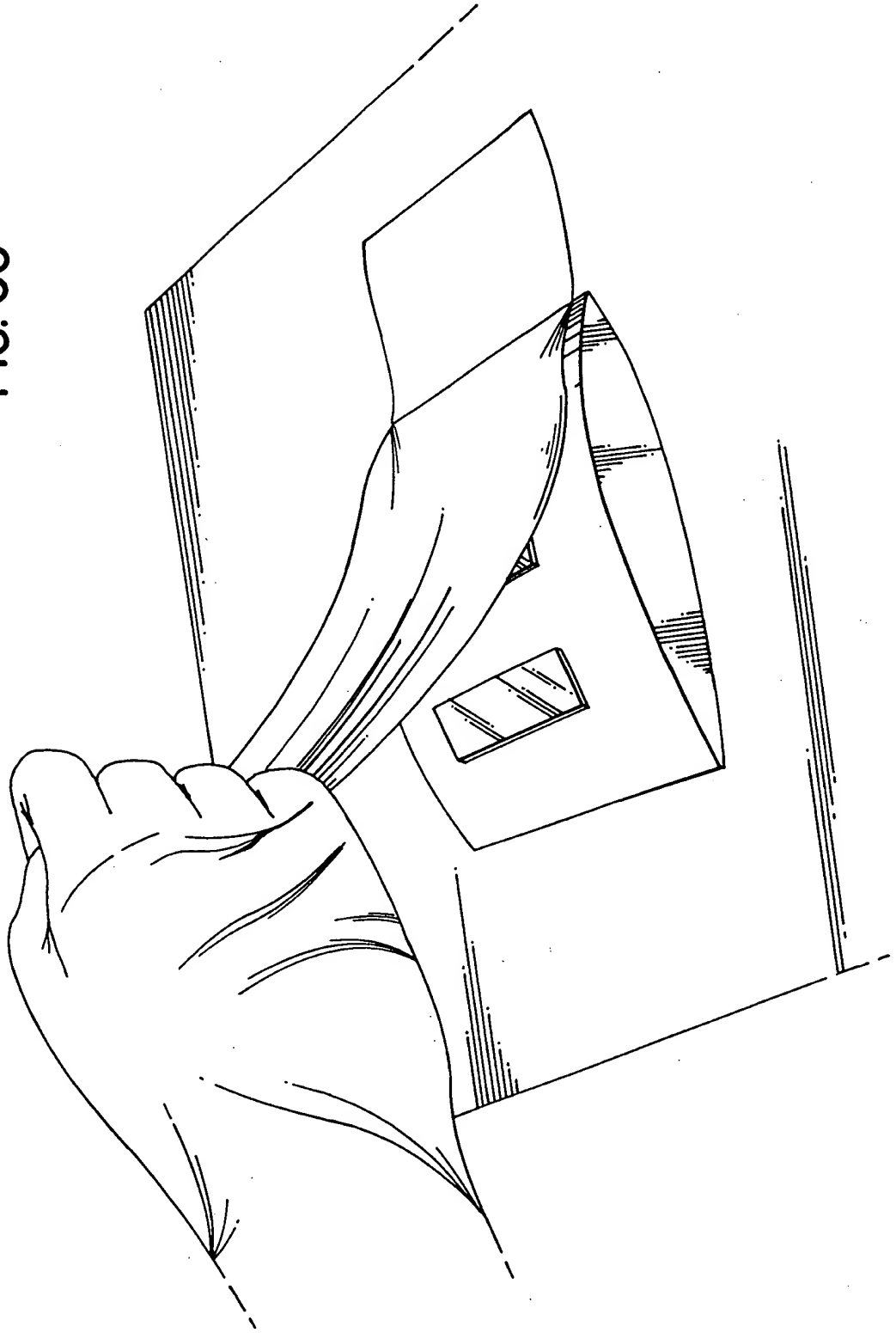


FIG. 6B

FIG. 6C



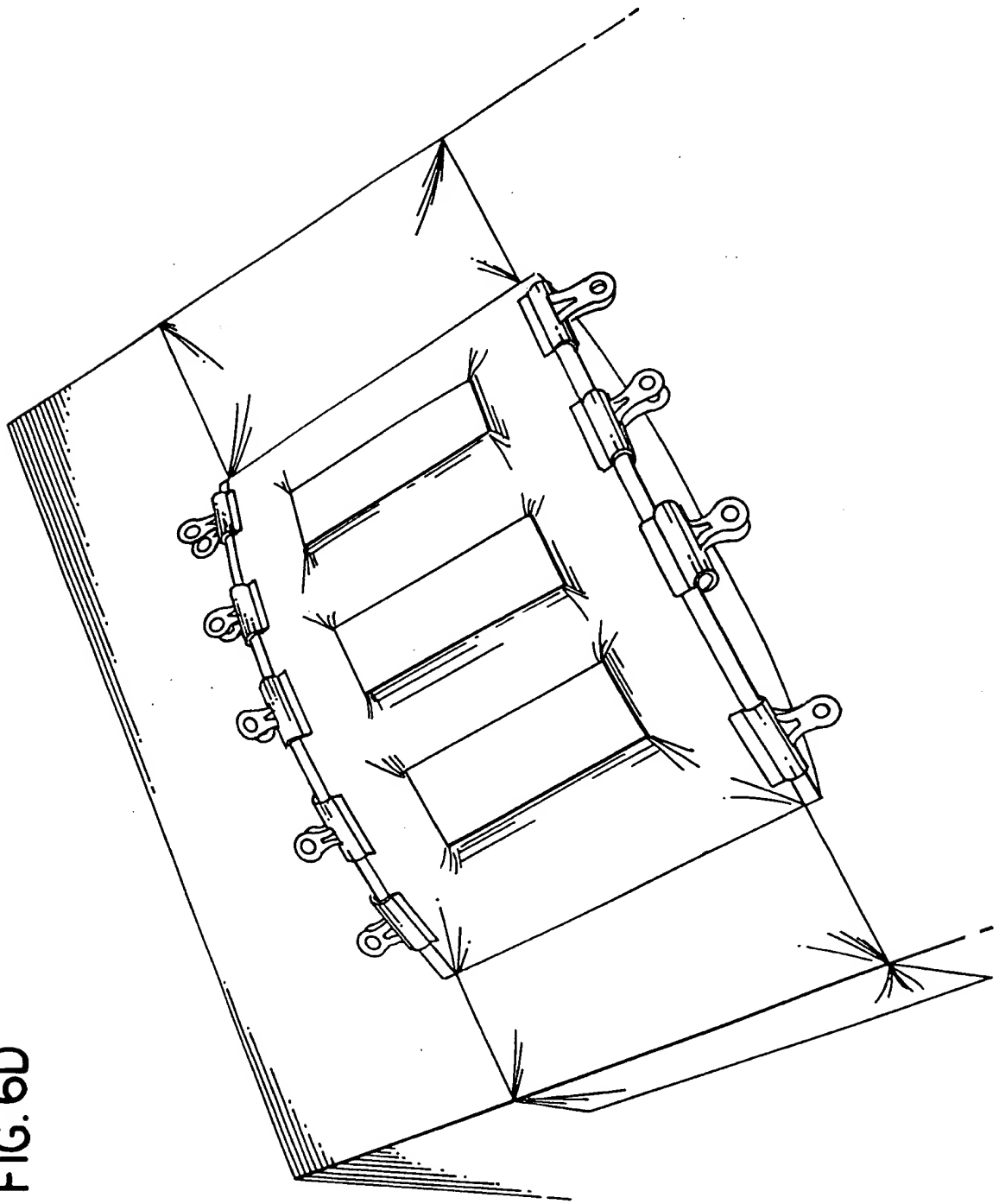


FIG. 6D

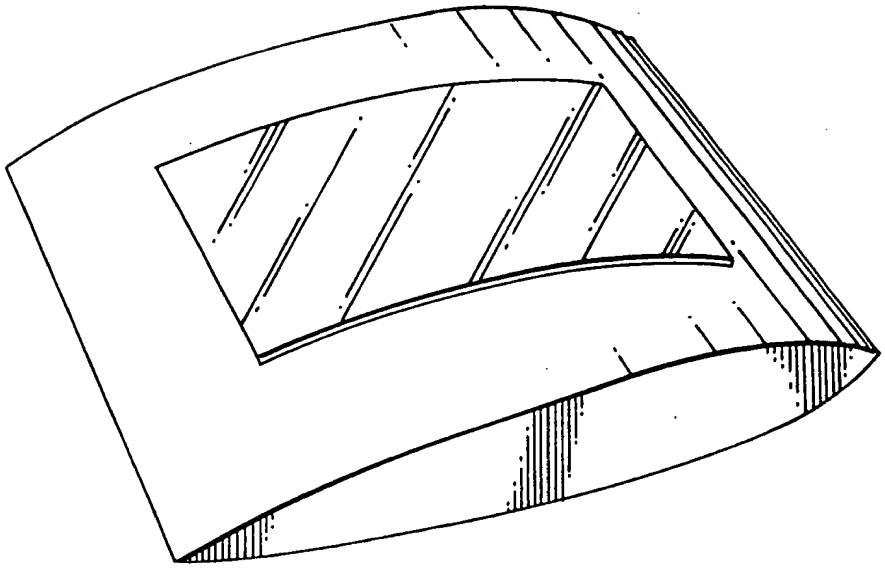


FIG. 7A

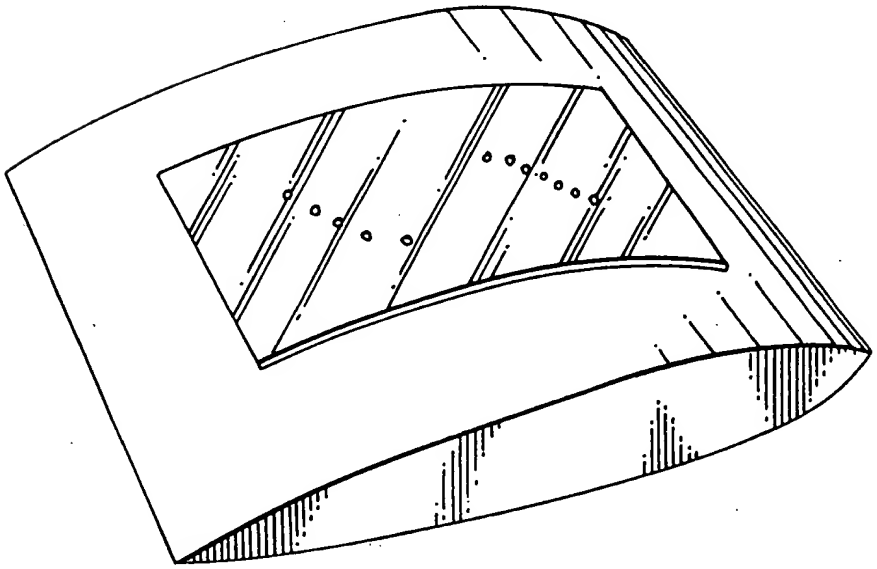
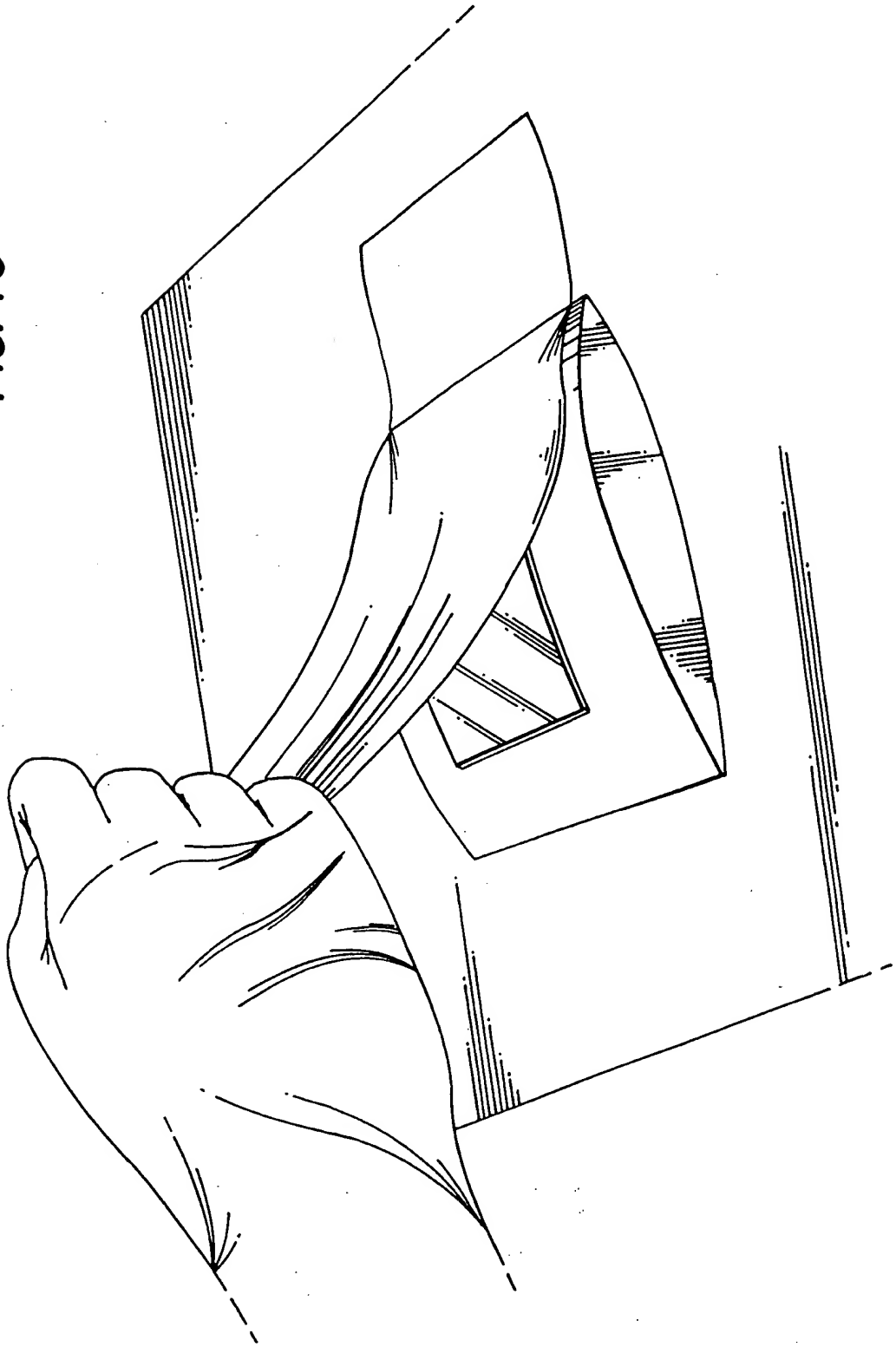


FIG. 7B

FIG. 7C



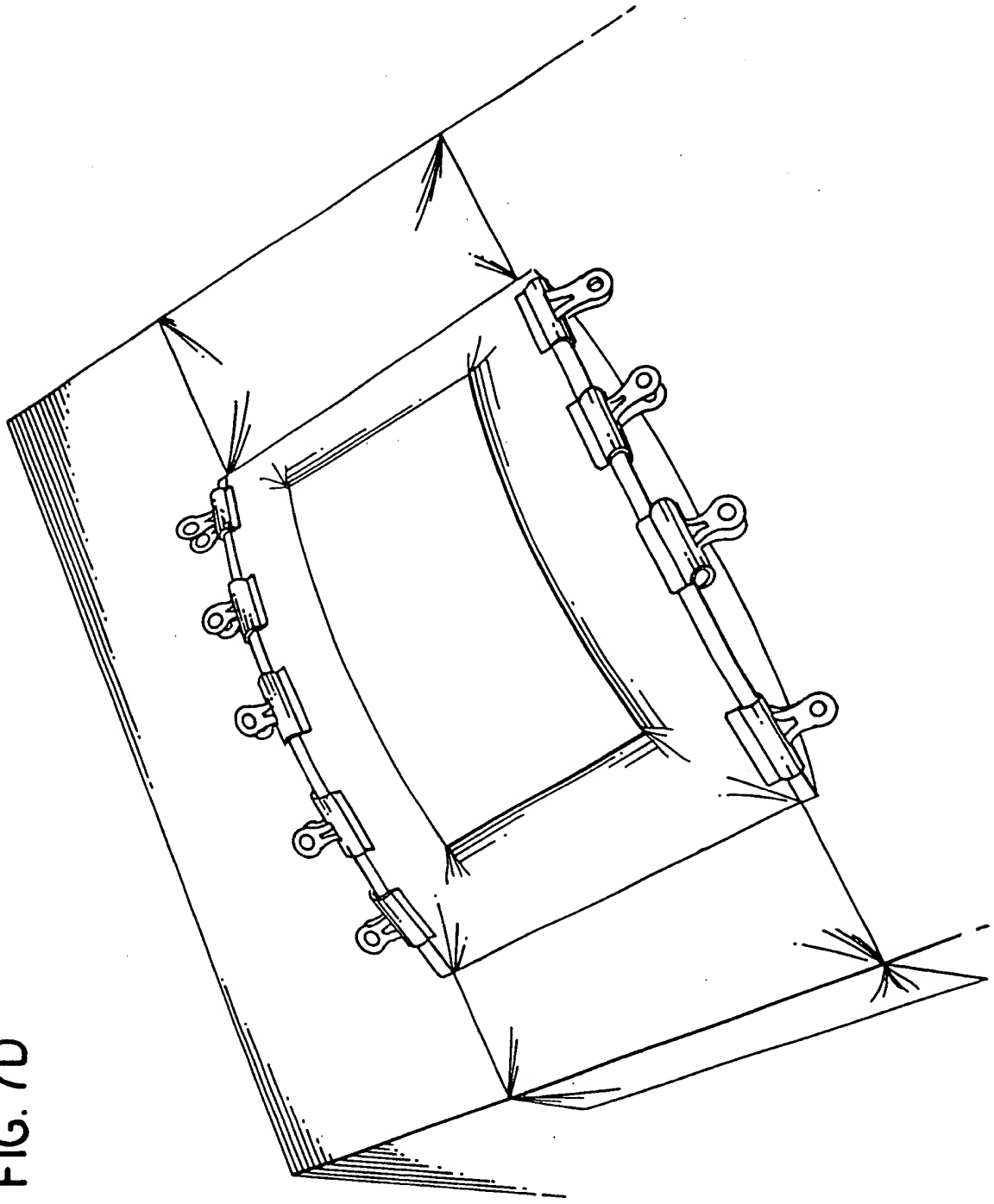


FIG. 7D